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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,815	08/07/2003	Jay D. Knitter	200209059-1	9770

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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BIAGINI, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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2142

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/16/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/635,815

Applicant(s)

KNITTER, JAY D.

Examiner

Christopher D. Biagini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/7/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement filed 8/7/2003 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because no publisher or place of publication is listed for reference A5, *The Apache SOAP Deployment Descriptor*. The information disclosure statement has been placed in the application file, but reference A5 has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

### ***Drawings***

1. Fig. 1 is objected to under 37 CFR 1.84(o) because it lacks suitable descriptive legends.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

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prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 101***

3. Claims 19-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
4. The term "program product" refers to software *per se*. In the absence of a structurally and functionally interrelated computer-readable medium, software *per se* is not statutory subject matter. See MPEP §2106.01.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 6-9, 15-18, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Each of the claims recites a Simple Object Access Protocol (or its abbreviation, SOAP), but it is unclear to which Simple Object Access Protocol the claims are directed. Applicant's specification incorporates by reference U.S. Patent No. 6,457,066 (hereinafter, "the '066 patent"), but also refers to the Apache Axis API (see paragraphs [0003]-[0004]). The Examiner notes that the protocol described in the '066 patent is not the same as that implemented by Apache Axis. The protocol described in the '066 patent is for accessing Microsoft COM Automation objects using MIME-encoded messages (see col. 3, lines 1-64), while the protocol that is implemented by Apache Axis is for accessing W3C SOAP web services using XML messages (see "Introduction" on the Axis home page). The protocols are similar in that they are layered on top of HTTP and are used to access remote objects, but are otherwise entirely different.
8. For the purposes of this examination, "Simple Object Access Protocol" will be interpreted to mean the protocol described in the '066 patent.

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9. Claims 19-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "identifying an identifier of an object on the client computer invoking the object on the data server the client computer from an execution stack" is grammatically incorrect.

10. For the purposes of this examination, the phrase will be interpreted to mean "identifying an identifier of an object on the client computer invoking the object on the data server from an execution stack."

***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-2, 11, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Ryuutou et al. (US PG PUB 2002/0083191, hereinafter "Ryuutou").

13. As to claim 1, Ryuutou shows a method of identifying a message source in a network, comprising: receiving a method call (comprising a request: see [0004]-[0005] and [0046]) from a client computer (PC 21) to invoke an object on a data server (comprising a CORBA AP server: see [0047]); packaging the method call in a message

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to be sent from a client server (tunnel server 22) to the data server via the network (see [0047]); on the client server, identifying the client computer from an execution stack (the execution stack comprising the tunnel server's TCP/IP stack: see [0053] and [0056]); and transmitting the message to the data server (see [0047] and [0064]).

14. As to claim 2, Ryuutou shows the limitations of claim 1 as applied above, and further shows on the client computer, generating the method call to invoke the object on the data server (see lines 4-10 of [0036]).

15. As to claim 11, Ryuutou shows a client server (tunnel server 22) configured to transmit messages to a data server (comprising a CORBA AP server: see [0047]) via a network (comprising the connections shown in Fig. 4), comprising: a client computer interface configured to receive a method call from a client computer to invoke an object on the data server (comprising the necessary interface which receives requests from a client: see [0004]-[0005] and [0046]); and a data processing unit (a necessary component of any computer-implemented system) coupled to the client computer interface, the data processing unit being configured to: package the method call in a message to be sent from the client server to the data server via the network (see [0047]); identify the client computer from an execution stack (the execution stack comprising the tunnel server's TCP/IP stack: see [0053] and [0056]); and transmit the message to the data server (see [0047] and [0064]).

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16. The examiner notes that the preamble of claim 11 has been given patentable weight since the body of the claim refers to the "data server" and "network" elements.

17. As to claim 22, it is noted the limitations "means for receiving," "means for packaging," "means...for identifying," and "means for transmitting" meet the requirements for treatment under 35 U.S.C. 112, sixth paragraph. See MPEP §2181.

18. The limitation "means for receiving" will be construed to correspond to the "client computer interface" recited in claim 11. The limitations "means for packaging," "means...for identifying," and "means for transmitting" will be construed to correspond to the "data processing unit" also recited in claim 11. Accordingly, claim 22 is rejected for the reasons given in the discussion of claim 11 above.

### ***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryuutou (US PG PUB 2002/0083191) in view of Beck et al. (US Pat. No. 6,651,109, hereinafter "Beck").



21. Ryuutou shows the limitations of claims 2 and 11 as applied above, but does not show transmitting an identifier of an object on the client computer invoking the object on the data server along with the message. Beck shows transmitting an identifier (comprising an object ID) of an object on a client (sender object 330) invoking an object on a data server (receiver object 350: see col. 5, lines 40-47). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Ryuutou with the identifier transmission of Beck in order to determine a level of trustworthiness for the sender object, and establish communication between the sender and receiver accordingly (see Beck, col. 5, line 61 to col. 6, line 4).

22. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryuutou (US PG PUB 2002/0083191) in view of Beck (US Pat. No. 6,651,109), and further in view of Mori et al. (US Pat. No. 5,247,615, hereinafter "Mori").

23. Ryuutou in view of Beck shows the limitations of claims 3 and 12 as applied above, but does not show wherein the identifier is stored in a header of the message. Mori shows storing an identifier in the header of a message (see col. 6, lines 66-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the invention of Ryuutou in view of Beck with the teachings of Mori in order to keep message metadata and message payload separate, to ensure that the message is more easily parsed by the receiver.

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24. Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryuutou (US PG PUB 2002/0083191) in view of Beck (US Pat. No. 6,651,109), and further in view of Purdy et al. (US Pat. No. 6,115,719, hereinafter "Purdy").

25. Ryuutou in view of Beck show the limitations of claims 3 and 12 as applied above, but do not show wherein the identifier comprises a fully qualified class name. Purdy shows a fully qualified class name (see Fig. 1B and col. 4, lines 39-46). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Ryuutou in view of Beck with the fully qualified class name as taught by Purdy in order to uniquely identify an object using an existing and well-known classification system.

26. Claims 6-9 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryuutou (US PG PUB 2002/0083191) in view of Mein et al. (US Pat. No. 6,457,066, hereinafter "Mein").

27. As to claims 6 and 15, Ryuutou shows the limitations of claims 1 and 11 as applied above, but does not show wherein the message comprises a simple object access protocol (SOAP) message. Mein shows a simple object access protocol message (see col. 5, lines 17-27). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Ryuutou with the SOAP message of Mein in order to access remote objects through firewalls which only allow HTTP packets to pass through (see Mein, col. 2, lines 59-67).

28. As to claims 7 and 16, Ryuutou in view of Mein shows the limitations of claims 6 and 15 as applied above, but does not show wherein packaging the method call in a message comprises building up a SOAP request. Mein shows building up a SOAP request (see col. 5, lines 22-27). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the invention of Ryuutou in view of Mein with the request building of Mein in order to access remote objects through firewalls which only allow HTTP packets to pass through (see Mein, col. 2, lines 59-67).

29. As to claims 8 and 17, Ryuutou in view of Mein shows the limitations of claims 7 and 16 as applied above, but does not show wherein transmitting the message comprises implementing a SOAP application programming interface (API). Mein shows implementing a SOAP API (see col. 3, lines 48-51). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the invention of Ryuutou in view of Mein with the SOAP API of Mein in order to access remote objects through firewalls which only allow HTTP packets to pass through (see Mein, col. 2, lines 59-67).

30. As to claims 9 and 18, it is noted that the SOAP API of Mein as applied to claims 8 and 17 above comprises a messaging API, since it is used "for processing SOAP messages" (see Mein, col. 3, lines 48-51).

31. Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryuutou (US PG PUB 2002/0083191) in view of Jacoby (US Pat. No. 5,768,552).

32. As to claim 10, Ryuutou shows the limitations of claim 2 as applied above, but does not show displaying a Web service graphical component representing the object; and displaying an interconnecting graphical component representing an associated interaction between the client computer and the data server.

33. Jacoby shows displaying a Web service graphical component representing an object (see depiction of Host 21 in Fig. 3A) and displaying an interconnecting graphical component representing an associated interaction between a client computer and a data server (for example, line segment 302 between Host 21 and Host 51 in Fig. 3A). See also col. 6, line 43 to col. 7, line 13. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Ryuutou with the graphical display of Jacoby in order to allow a network administrator to easily monitor activity on a network from a central vantage point (see Jacoby, col. 1, lines 60-62).

34. As to claim 19, Ryuutou shows a program product comprising machine-readable program code (inherent to any computer-implemented system) performing method steps of: on the client computer (PC 21), generating the method call to invoke an object on the data server (see lines 4-10 of [0036]); packaging the method call in a message to be sent from the client server (tunnel server 22) to the data server (comprising a CORBA AP server) via the network (see [0047]); on the client server, identifying an

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identifier of an object on the client computer invoking the object on the data server from an execution stack (the identifier comprising an IP address, the object on the client computer comprising the software which makes the request, and the execution stack comprising the tunnel server's TCP/IP stack: see [0053] and [0056]); and transmitting the message to the data server (see [0047] and [0064]).

35. The examiner notes that the preamble of claim 19 has been given patentable weight since the body of the claim refers to the network, client computer, client server, and data server. Ryuutou shows a network (the connections shown in Fig. 4) comprising a client computer (PC 21), client server (tunnel server 22), and a data server (comprising a CORBA AP server). Ryuutou does not show graphically emulating the network. Jacoby shows graphically emulating a network (see col. 6, line 43 to col. 7, line 13). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Ryuutou with the graphical display of Jacoby in order to allow a network administrator to easily monitor activity on a network from a central vantage point (see Jacoby, col. 1, lines 60-62).

36. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryuutou (US PG PUB 2002/0083191) in view of Jacoby (US Pat. No. 5,768,552), and further in view of Purdy (US Pat. No. 6,115,719).

37. Ryuutou in view of Jacoby shows the limitations of claim 19 as applied above, but does not show wherein the identifier comprises a fully qualified class name. Purdy shows a fully qualified class name (see Fig. 1B and col. 4, lines 39-46). It would have

been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Ryuutou in view of Jacoby with the fully qualified class name as taught by Purdy in order to uniquely identify an object using an existing and well-known classification system.

38. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryuutou (US PG PUB 2002/0083191) in view of Jacoby (US Pat. No. 5,768,552), and further in view of Mein (US Pat. No. 6,457,066).

39. Ryuutou in view of Jacoby shows the limitations of claim 19 as applied above, but does not show wherein the message comprises a simple object access protocol (SOAP) message. Mein shows a simple object access protocol message (see col. 5, lines 17-27). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Ryuutou in view of Jacoby with the SOAP message of Mein in order to access remote objects through firewalls which only allow HTTP packets to pass through (see Mein, col. 2, lines 59-67).


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D. Biagini whose telephone number is (571) 272-9743. The examiner can normally be reached on M-R 7:30-5, 7:30-4 alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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